

#7

EXPRESS MAIL NO.: EL 501 641 738 US

Sheet 1 of 5

## LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

8449-178-999

APPLICATION NO.

09/873,403

APPLICANT

Srivastava, Pramod K.

FILING DATE

06/04/01

GROUP 1642

To be assigned

## U.S. PATENT DOCUMENTS

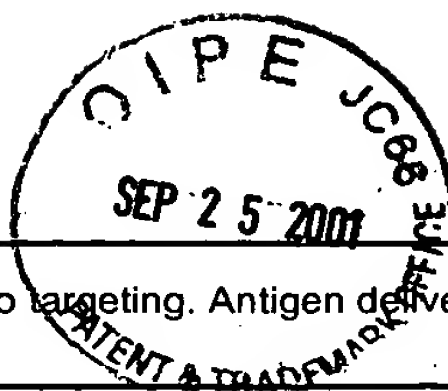
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
CY	AA	09/411,075		P. Srivastava			10/4/99
	AB	5,837,251	11/17/98	P. Srivastava			
	AC	5,935,576	8/10/99	P. Srivastava			
	AD	5,961,979	10/5/99	P. Srivastava			
	AE	5,985,270	11/16/99	P. Srivastava			
CY	AF	6,017,540	1/25/00	P. Srivastava			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
CY	AG	WO 94/14976	7/7/94	PCT				
	AH	WO 95/24923	9/21/95	PCT				
	AI	WO 96/10411	4/11/96	PCT				
	AJ	WO 97/10000	3/20/97	PCT				
	AK	WO 97/10002	3/20/97	PCT				
	AL	WO 98/46743	10/22/98	PCT				
CY	AM	WO 99/50303	10/7/99	PCT				

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

CY	AN	Arnold-Schild et al., 1999, "Cutting edge: receptor-mediated endocytosis of heat shock proteins by professional antigen-presenting cells", J. Immunol. 162: 3757-3760.
	AO	Arnold et al., 1995, "Cross-priming of minor histocompatibility antigen-specific cytotoxic T cells upon immunization with the heat shock protein gp96", J Exp Med. Sep 1;182(3):885-9.
	AP	Asea et al., 2000, "HSP70 stimulates cytokine production through a CD14 dependant pathway, demonstrating its dual role as a chaperone and cytokine", Nature Med. 6: 435-42
	AQ	Bardwell et al., 1984, "Major heat shock gene of Drosophila and the Escherichia coli heat-inducible dnaK gene are homologous", Proc Natl Acad Sci U S A. 81(3):848-52.
	AR	Bhattacharjee et al., 1999, "Incorporation of non-proteolytic proteins by murine $\alpha$ -2 macroglobulin", Biochimica et Biophysica Acta 1432:49-56
	AS	Bevan, 1995, "Antigen presentation to cytotoxic T lymphocytes in vivo", J.Exp. Med. 192: 639-41
	AT	Binder et al., 1998, Cell Stress & Chaperones 3 (Supp.1): 2.
	AU	Blachere et al., 1997, "Heat shock protein-peptide complexes, reconstituted in vitro, elicit peptide-specific cytotoxic T lymphocyte response and tumor immunity", J Exp Med. 186(8):1315-22.
	AV	Castellino et al., 2000, "Receptor-mediated Uptake of Antigen/Heat Shock Protein Complexes Results in Major Histocompatibility Complex Class I Antigen Presentation via Two Distinct Processing Pathways", J. Exp. Med. 191: 1957-64.
CY	AW	Chen et al., 1999, "Human 60-kDa Heat-Shock Protein: A Danger Signal to the Innate Immune System", J. Immunology 162: 3212-3219



CY	AX	Chu et al., 1994, "Adjuvant-free in vivo targeting. Antigen delivery by $\alpha_2$ -macroglobulin enhances antibody formation", J. Immun. 152(4):1538-45.
CY	AY	Chu et al., 1994, "Alpha 2-macroglobulin: a sensor for proteolysis", Ann N Y Acad Sci. 737:291-307.
CY	AZ	Chu and Pizzo, 1994, "Alpha 2-Macroglobulin, complement, and biologic defense: antigens, growth factors, microbial proteases, and receptor ligation", Lab Invest. 1994 Dec;71(6):792-812.
CY	BA	Chu and Pizzo, 1993, "Receptor mediated antigen delivery into macrophages. Complexing antigen to $\alpha_2$ -macroglobulin enhances presentation into T cells", J. Immun. 150(1):48-58.
CY	BB	Ciupitu et al., 1998, "Immunization with a lymphocytic choriomeningitis virus peptide mixed with heat shock protein 70 results in protective antiviral immunity and specific cytotoxic T lymphocytes", J Exp Med. 187(5):685-91.
	BC	Coutinho et al., 1998, "Alpha-2-macroglobulin receptor is differently expressed in peritoneal macrophages from C3H and C57/B16 mice and up-regulated during Trypanosoma cruzi infection", Tissue and Cell 30: 407-15
	BD	Craig et al., 1993, "Chaperones: helpers along the pathways to protein folding", Science. 260(5116):1902-3.
↓	BE	Day et al., 1997, "Direct delivery of exogenous MHC class I molecule-binding oligopeptides to the endoplasmic reticulum of viable cells", Proc Natl Acad Sci. USA 94: 8064-8069
CY	BF	Dennis et al., 1989, "Alpha 2-macroglobulin is a binding protein for basic fibroblast growth factor", J Biol Chem. 264 (13):7210-6.
	BG	Fadok et al., 2000, "A receptor for phosphatidylserine-specific clearance of apoptotic cells", Nature 405(6782):85-90.
	BH	Forrester et al., 1983, "Effect of modified alpha 2macroglobulin on leucocyte locomotion and chemotaxis", Immunology. 50(2):251-9.
	BI	Gething et al., 1992, "Protein folding in the cell", Nature. 355(6355):33-45.
↓	BJ	Greenstone et al., 1998, "Chimeric papillomavirus virus-like particle elicit antitumor immunity against the E7 oncoprotein in an HPV16 tumor model", Proc. Natl. Acad. Sci. USA 95:1800-1805
CY	BK	Gron and Pizzo, 1998, "Non proteolytic Incorporation of Protein Ligands into Human $\alpha_2$ macroglobulin: Implications for the binding mechanism of $\alpha_2$ - macroglobulin", Biochem. 37:6009-6014
	BL	Haas et al., 1988, "cDNA cloning of the immunoglobulin heavy chain binding protein", Proc Natl Acad Sci U S A. 85(7):2250-4.
	BM	Hall et al., 1981, "Proteolytic cleavage sites on alpha 2-macroglobulin resulting in proteinase binding are different for trypsin and Staphylococcus aureus V-8 proteinase", Biochem Biophys Res Commun. 1981 May 15;100(1):8-16.
	BN	Herz et al., 1988, "Surface location and high affinity for calcium of a 500-kd liver membrane protein closely related to the LDL-receptor suggest a physiological role as lipoprotein receptor", EMBO J. 7(13):4119-27.
	BO	Hickey et al., 1989, "Sequence and regulation of a gene encoding a human 89-kilodalton heat shock protein", Mol Cell Biol. 9(6):2615-26.
	BP	Hickey et al., 1986, "Sequence and organization of genes encoding the human 27 kDa heat shock protein", Nucleic Acids Res. 14(10):4127-45.
	BQ	Hilliker et al., 1992, "Assignment of the gene coding for the alpha 2-macroglobulin receptor to mouse chromosome 15 and to human chromosome 12q13-q14 by isotopic and nonisotopic in situ hybridization", Genomics. 13(2):472-4.
	BR	Holtet et al., 1994, "Receptor-binding domain of human alpha 2-macroglobulin. Expression, folding and biochemical characterization of a high-affinity recombinant derivative", FEBS Lett. 344(2-3):242-6.
	BS	Holtet et al., 1994, "Recombinant $\alpha_2$ -M Receptor binding domain binds to the $\alpha_2$ -M receptor with high affinity", Ann N Y Acad Sci. 737:480-2.
	BT	Huang et al., 1996, "The immunodominant major histocompatibility complex class I-restricted antigen of a murine colon tumor derives from an endogenous retroviral gene product", Proc Natl Acad Sci U S A. 93(18):9730-5.
↓	BU	Huang et al., 1999, "NMR solution structure of complement-like repeat CR8 from the low density lipoprotein receptor -related protein", J. of Biolog. Chem. 274: 14130-14136
CY	BV	Huang et al., 1984, "Specific covalent binding of platelet-derived growth factor to human plasma alpha 2-macroglobulin. Proc Natl Acad Sci U S A. 81(2):342-6.

CY	BW	Hunt et al., 1990, "Characterization and sequence of a mouse hsp70 gene and its expression in mouse cell lines", Gene. 87(2):199-204.
	BX	Ishii et al., 1999, "Isolation of MHC class I-restricted tumor antigen peptide and its precursors associated with heat shock proteins hsp70, hsp90, and gp96", J Immunol. 162(3):1303-9
	BY	Jensen et al., 1989, "Comparison of $\alpha$ -macroglobulin receptors from human, baboon, rat and mouse liver", Biochem. Arch. 5:171-6
	BZ	Jindal et al., 1989, "Primary structure of a human mitochondrial protein homologous to the bacterial and plant chaperonins and to the 65-kilodalton mycobacterial antigen. Mol Cell Biol. 9(5):2279-83.
	CA	Kan et al., 1985, "Nucleotide sequence of cDNA encoding human alpha 2-macroglobulin and assignment of the chromosomal locus", Proc Natl Acad Sci U S A. 82(8):2282-6.
	CB	Kol et al., 2000, "Cutting edge: heat shock protein (HSP)60 activates the innate immune response: CD14 is an essential receptor for HSP60 activation of mononuclear cells", J Immunol. 164(1):13-17
	CC	Krieger and Herz, 1994, "Structures and functions of multiligand lipoprotein receptors: macrophage scavenger receptors and LDL receptor-related protein (LRP)", Annu Rev Biochem. 63:601-37.
	CD	Kristensen et al., 1990, "Evidence that the newly cloned low-density-lipoprotein receptor related protein (LRP) is the alpha 2-macroglobulin receptor", FEBS Lett. 276(1-2):151-5.
	CE	Lindquist et al., 1988, "The heat-shock proteins", Annu Rev Genet. 22:631-77
	CF	Maki et al., 1990, "Human homologue of murine tumor rejection antigen gp96: 5'-regulatory and coding regions and relationship to stress-induced proteins", Proc Natl Acad Sci U S A. 87(15):5658-62.
	CG	Maki et al., 1993, "Mapping of the genes for human endoplasmic reticular heat shock protein gp96/grp9", Somat Cell Mol Genet. 19(1):73-81.
	CH	McKee and Collins, 1974, "Intravascular Leukocyte thrombi and aggregates as a cause of morbidity and mortality in leukemia", Medicine 53: 463-478
↓	CI	Menoret et al., 1999, "Association of peptides with heat shock protein gp96 occurs in vivo and not after cell lysis", Biochem Biophys Res Commun. 1999 Sep 7;262(3):813-8.
CY	CJ	Misra et al., 1993, "Receptor-recognized alpha 2-macroglobulin-methylamine elevates intracellular calcium, inositol phosphates and cyclic AMP in murine peritoneal macrophages", Biochem J. 290 ( Pt 3):885-91.
CY	CK	Mitsuda et al., 1993, "A receptor-mediated antigen delivery and incorporation system", Biochem. and Biophys. Res. Comm. 191: 1326-31
CY	CL	Mitsuda et al., 1993, "A receptor mediated delivery of an HIV 1 derived peptide vaccine", Biochem Biophys Res Commun 194(3): 1155-60
	CM	Moestrup et al., 1993, " $\alpha_2$ -macroglobulin-proteinase complexes, plasminogen activator inhibitor type-1-plasminogen activator complexes, and receptor-associated protein bind to a region of the $\alpha_2$ -macroglobulin receptor containing a cluster of eight complement type repeats", J. of Biolog. Chem. 268: 13691-13696.
	CN	Moestrup et al., 1992, "Distribution of the alpha 2-macroglobulin receptor/low density lipoprotein receptor-related protein in human tissues", Cell Tissue Res. 269(3):375-82.
	CO	Nicchitta et al., 1998, "Biochemical, cell biological and immunological issues surrounding the endoplasmic reticulum chaperone GRP94/gp96", Curr Opin Immunol. 10(1):103-9.
	CP	Nielsen et al., 1996, "Identification of residues in alpha-macroglobulins important for binding to the alpha2-macroglobulin receptor/Low density lipoprotein receptor-related protein", J Biol Chem. 271(22):12909-12.
	CQ	Norbury et al., 1997, "Constitutive macropinocytosis allows TAP-dependent major histocompatibility complex class I presentation of exogenous soluble antigen by bone marrow-derived dendritic cells", Eur J Immunol. 1997 Jan;27(1):280-8.
↓	CR	Nykjaer et al., 1992, "Purified alpha 2-macroglobulin receptor/LDL receptor-related protein binds urokinase.plasminogen activator inhibitor type-1 complex. Evidence that the alpha 2-macroglobulin receptor mediates cellular degradation of urokinase receptor-bound complexes", J Biol Chem. 267(21):14543-6.
CY	CS	O'Connor-McCourt et al., 1987, "Latent transforming growth factor-beta in serum. A specific complex with alpha 2-macroglobulin", J Biol Chem. 262(29):14090-9.

C I P E J C 8 6  
SEP 2 5 2001

EXPRESS MAIL NO.: EL 501 641 738 US

Sheet 4 of 5

CY	CT	Orth et al., 1992, "Complexes of tissue-type plasminogen activator and its serpin inhibitor plasminogen-activator inhibitor type 1 are internalized by means of the low density lipoprotein receptor-related protein/alpha 2-macroglobulin receptor", Proc Natl Acad Sci U S A. 89(16):7422-6.
CY	CU	Osada et al., 1987, "Murine T cell proliferation can be specifically augmented by macrophages fed with specific antigen: alpha-2-macroglobulin conjugate", Biochem. and Biophys. Res. Comm. 146: 26-31
CY	CV	Osada et al., 1988, "Antibodies against viral proteins can be produced effectively in response to the increased uptake of alpha 2 macroglobulin: viral protein conjugate by macrophages", Biochem and Biophys. Res. Comm. 150: 883-889.
CY	CW	Qiu et al., 1999, "alpha 2 macroglobulin enhances the clearance of endogenous soluble beta-amyloid peptide via low density lipoprotein receptor-related protein in cortical neurons", J. Neurochem. 73(4):1393-1398
	CX	Sargent et al., 1989, "Human major histocompatibility complex contains genes for the major heat shock protein HSP70", Proc Natl Acad Sci U S A. 86(6):1968-72.
	CY	Savill et al., 1992, "Thrombospondin cooperates with CD36 and the vitronectin receptor in macrophage recognition of neutrophils undergoing apoptosis", J Clin Invest. 90(4):1513-22.
	CZ	Schuler and Steinman, 1997, "Dendritic cells as adjuvants for immune-mediated resistance to tumors", J Exp Med. 186(8):1183-7.
	DA	Singh-Jasjua et al., 2000, "Cross Presentation of Glycoprotein 96-associated antigens on major histocompatibility complex class I molecules requires receptor-mediated endocytosis", J. Exp. Med. 191:1965-74
	DB	Soeiro et al., 2000, "Trypanosoma cruzi: Acute Infection Affects Expression of alpha-2-macroglobulin and A2MR/LRP Receptor Differently in C3H and C57BL/6 Mice", Exper. Parasitology 96: 97-107
	DC	Srivastava et al., 1991, "Stress-induced proteins in immune response to cancer", Curr Top Microbiol Immunol. 167:109-23.
	DD	Srivastava et al., 1987, "5'-structural analysis of genes encoding polymorphic antigens of chemically induced tumors." Proc. Natl. Acad. Sci USA 85:3807-3811
	DE	Srivastava PK, 1993, "Peptide-binding heat shock proteins in the endoplasmic reticulum: role in immune response to cancer and in antigen presentation", Adv Cancer Res. 1993;62:153-77.
	DF	Srivastava PK, 1994, "Heat shock proteins in immune response to cancer: the Fourth Paradigm", Experientia. (11-12):1054-60.
	DG	Srivastava PK, 1988, "Individually distinct transplantation antigens of chemically induced mouse tumors", Immunol Today. 9(3):78-83.
	DH	Srivastava et al., 1988, "Chromosomal assignment of the gene encoding the mouse tumor rejection antigen gp96", Immunogenetics. 28(3):205-7
	DI	Srivastava et al., 1994, "Heat shock proteins transfer peptides during antigen processing and CTL priming", Immunogenetics. 39(2):93-8. Review.
	DJ	Srivastava PK, 1986, "Tumor rejection antigens of chemically induced sarcomas of inbred mice", Proc Natl Acad Sci U S A. 83(10):3407-11.
	DK	Srivastava et al., 1998, "Heat shock proteins come of age: primitive functions acquire new roles in an adaptive world", Immunity. 8(6):657-65.
	DL	Strickland et al., 1990, "Sequence identity between the alpha 2-macroglobulin receptor and low density lipoprotein receptor-related protein suggests that this molecule is a multifunctional receptor", J Biol Chem. 15;265(29):17401-4.
	DM	Suto and Srivastava, 1995, "A mechanism for the specific immunogenicity of heat shock protein-chaperoned peptides", Science 269(5230):1585-8
	DN	Tamura et al., 1997, "Immunotherapy of tumors with autologous tumor-derived heat shock protein preparations", Science. 278(5335):117-20.
	DO	Ting et al., 1988, "Human gene encoding the 78,000-dalton glucose-regulated protein and its pseudogene: structure, conservation, and regulation", DNA. 7(4):275-86.
CY	DP	Udono H, Srivastava PK, 1994, "Comparison of tumor-specific immunogenicities of stress-induced proteins gp96, hsp90, and hsp70", J. Immunol. 152(11):5398-403.



SEP 25 2001

EXPRESS MAIL NO.: EL 501 641 738 US

Sheet 5 of 5

CY	DQ	Udono et al., 1994, "Cellular requirements for tumor-specific immunity elicited by heat shock proteins: tumor rejection antigen gp96 primes CD8+ T cells in vivo", Proc Natl Acad Sci U S A. 91(8):3077-81
	DR	Udono H, Srivastava PK, 1993, "Heat shock protein 70-associated peptides elicit specific cancer immunity", J Exp Med. 178(4):1391-6.
	DS	Ullrich et al., 1986, "A mouse tumor-specific transplantation antigen is a heat shock-related protein", Proc Natl Acad Sci U S A. 83(10):3121-5.
	DT	Van Leuven et al., 1993, "Molecular cloning and sequencing of the murine alpha-2-macroglobulin receptor cDNA", Biochim Biophys Acta. 1173(1):71-4.
	DU	Wassenberg et al., 1999, "Receptor mediated and fluid phase pathways for internalization of the ER Hsp90 chaperone GRP94 in murine macrophages. J. Cell Science 112: 2167-2175.
	DV	Welch et al., 1993, "How cells respond to stress", Sci Am. 268(5):56-64
	DW	Willnow et al., 1994, "Molecular dissection of ligand binding sites on the low density lipoprotein receptor-related protein", J. of Biolog. Chem. 269: 15827-15832
	DX	Wu et al., 1998, "Oxidized $\alpha_2$ -Macroglobulin ( $\alpha_2$ M) Differentially Regulates Receptor Binding by Cytokines/Growth Factors: Implications for Tissue Injury and Repair Mechanisms in Inflammation", J.Immun. 4356-4365
✓	DY	Yamazaki et al., 1989, "Nucleotide sequence of a full-length cDNA for 90 kDa heat-shock protein from human peripheral blood lymphocytes", Nucleic Acids Res. 17(17):7108.
CY	DZ	Young et al., 1990, "Stress proteins and immunology", Annu Rev Immunol. 8:401-20.
EXAMINER		DATE CONSIDERED
Chris p h HX		1-14-2003
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		

## SUPPLEMENTAL LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

8449-178-999

APPLICATION NO.

09/873,403

APPLICANT

Srivastava et al.

FILING DATE

06/04/01

GROUP

1642

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
CY	EA	6,403,092	6/11/02	Pizzo et al.			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
CY	EB	WO 02/15930	2/28/02	PCT				

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER

Christopher H Y

DATE CONSIDERED

1-14-2003

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED

OCT 28 2002

TECH CENTER 1600/2900